

Chemical Exposure to Methylene Chloride Results In 13 Workers Deaths.

Federal OSHA has identified at least 13 worker deaths since 2000 related to bathtub refinishing with stripping agents containing methylene chloride. In the majority of the identified cases, the workers were working alone, in poorly ventilated bathrooms, with inadequate respiratory protection and little or no training on the hazards of the chemicals they were using.

This colorless liquid has a sweet aroma and is widely used as a solvent. Due to the highly volatile nature of methylene chloride, it easily enters the body through the lungs and skin. The body metabolized it to carbon monoxide potentially leading to carbon monoxide poisoning. Prolonged contact to the skin can cause skin irritation or chemical burns. Methylene Chloride is a suspected carcinogen.

Preventing Future Accidents

The most effective method is to use non methylene chloride based strippers.

Always use methylene chloride in well ventilated areas. Provide mechanical ventilation to move hazardous vapors away from the point of use. This system should be of sufficient capacity and so arranged as to remove fumes at the source and keep the concentration in the breathing zone within safe limits. Place the ductwork in the tub area and exhaust the vapors outside the building.

Use adequate respiratory Protection. Use a full facepiece supplied air respirator when using methylene chloride based strippers in bathtub refinishing operations. Cartridge respirators would not be adequate for this work.

Provide personal protective equipment to prevent skin contact. Chemical resistant gloves, aprons, coveralls, boots and/or other resistant protective clothing.

RECOMMENDED (resistance to breakthrough longer than 8 hours) (18): Polyvinyl alcohol.

NOT RECOMMENDED for use (resistance to breakthrough less than 1 hour): Butyl rubber, natural rubber, neoprene, nitrile rubber, polyethylene, polyvinyl chloride, Viton(TM), Saranex(TM), CPF 3(TM).

For eye and face protection chemical safety goggles suitable for splash protection and/or a face shield.

Methylene Chloride in the workplace

Common uses of methylene chloride are as a paint stripper and degreaser, but multiple uses can be found throughout many industries. For example, its use can be found in the pharmaceutical industry to

manufacture drugs, the food industry to decaffeinate coffee and teas, and the automotive industry to produce multiple automotive parts.

All occupational exposure to the methylene in the workplace is required to be evaluated to determine employee exposure.

This occupational health standard establishes requirements for employers to control occupational exposure to methylene chloride (MC).

Part Number: 1910

- Part Title: Occupational Safety and Health Standards
- Subpart: Z
- Subpart Title: Toxic and Hazardous Substances
- Standard Number: 1910.1052
- Title: Methylene Chloride.
- Appendix: A , B , C

The Division of Education and Training will evaluate occupational exposure to MC and provide assistance in the implementation of this occupational health standard.

How do I request a free and confidential survey?

Employers seeking a consultative survey must submit a letter of request to:

Director

Division of Education and Training

Kentucky Department of Workplace Standards

1047 U.S. 127 South, Suite 4

Frankfort, KY 40601-4381

In addition to the letter of request, employers must include the following:

- **Consultative Survey Request Form.** A completed request form should be mailed with the letter of request.
- Copies of the company's injury and illness logs (OSHA 200/300 forms) for the last three years, if available.

The submission of these records will help the consultant better prepare for the specific working conditions at the worksite and allow the Division of Education and Training to establish a baseline to measure the impact of the consultative service. Employers who have not been required to keep records or who cannot locate their records should not hesitate to submit a consultative request letter and completed agreement/questionnaire.

The Division of Education and Training will not conduct a consultative survey of any workplace under citation by the Division of Compliance. However, under certain circumstances, an abatement assistance visit may be conducted when the Division of Education and Training is assured the company is earnestly seeking assistance in correcting the violations. Also, the Division of Education and Training will not perform a consultative survey of a workplace involved in a labor dispute because observances of normal workplace activities are essential in determining hazards.